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10/709,343	04/29/2004	Hai-Tao Ma	ACMP0106USA	3342
27765	7590	10/12/2007	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			WASHINGTON, JAMARES	
P.O. BOX 506			ART UNIT	PAPER NUMBER
MERRIFIELD, VA 22116			2625	
NOTIFICATION DATE	DELIVERY MODE			
10/12/2007	ELECTRONIC			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)
	10/709,343	MA, HAI-TAO
	Examiner	Art Unit
	Jamares Washington	2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 August 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendments and response received on August 3, 2007 have been entered. Claims 1-17 are currently pending. Claims 12-17 have been added. Applicant's newly amended claims, newly added claims, and arguments are addressed hereinbelow.

Claim Objections - 37 CFR 1.75(a)

2. The following is a quotation of 37 CFR 1.75(a):

The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery.

Claims 13 and 14 are objected to under 37 CFR 1.75(a), as failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention or discovery.

Regarding claims 13 and 14, the buffer pad between the "shaft seat and the shaft" lacks antecedent basis. The buffer pad introduced in independent claim 12 is set between the shaft seat and the upper or lower case. It is clear from the disclosure and claims that claims 13 and 14 should read:

"...set between the shaft seat and upper or lower case."

Preliminary corrections are made by examiner for examination purposes. Appropriate corrections required by applicant in further correspondence.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kunihiko Nakagawa et al (US 5724159 A).

Regarding claim 1, Nakagawa et al discloses a scanner comprising:
a housing including an upper case and a lower case (as depicted in Fig. 2, 6, 7, 8 etc.);
a shaft seat positioned between the upper case and the lower case (Fig. 4 numeral 2 "frame");
a shaft set on the shaft seat ("...a guide shall 4 fixed to the frame 2..." at column 8 line 59. Fig. 3);

a scanning module slidably set on the shaft (Fig. 3 numeral 6. Slides in the A or B direction as depicted);

a lock set on the housing for fixing the scanning module ("...holding member 15..." at column 9 line 53. Fig. 3 numeral 15); and

a buffer pad set between the lock and the scanning module ("The elastic member 14...has a shock absorbing function which does not easily transmit external vibrations...to the reading unit" at column 9 line 61. Fig. 3 numeral 14).

Regarding claim 3, Nakagawa et al discloses the scanner of claim 1 wherein the buffer pad is a ring-shaped elastomer set between the shaft seat and the shaft ("...the elastic member 14 is preferably made of rubber..." at column 9 line 61. Fig. 5a numeral 14 set between numeral 2 and numeral 6).

Regarding claim 4, Nakagawa et al discloses the scanner of claim 1 wherein the buffer pad is an elastomer laid on the lock and set between the lock and the scanning module (Fig. 5b numeral 15. The elastic member 14 cushions the "lock" or screw in this case and separates the locking mechanism from the scanner module as depicted).

Regarding claim 5, Nakagawa et al discloses the scanner of claim 1 wherein the buffer pad is an elastomer set into a groove which is between the lock and the scanning module (Fig. 5B depicts the elastic member 14 set into a groove of the frame 2 which is between the lock 15a and the scanning module 6).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kunihiko Nakagawa et al (US 5724159 A).

Regarding claim 2, Nakagawa et al teaches the scanner as rejected in claim 3 above wherein the buffer pad is an elastomer set between the shaft seat and the shaft.

Nakagawa et al fails to teach the buffer pad being an arc-shaped elastomer.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the ring-shaped elastomer into an arc-shaped elastomer to provide the same shock protection using less material and therefore cutting costs.

7. Claims 6-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunihiko Nakagawa et al (US 5724159 A) in view of Nick Merz et al (US 6900984 B2) and well known prior art.

Regarding claim 6, Nakagawa et al discloses a scanner comprising:
a housing including an upper case and a lower case (as depicted in Fig. 2, 6, 7, 8 etc.);

a shaft seat positioned between the upper case and the lower case (Fig. 4 numeral 2 "frame");

a shaft set on the shaft seat ("...a guide shall 4 fixed to the frame 2..." at column 8 line 59. Fig. 3);

a scanning module slidably set on the shaft (Fig. 3 numeral 6. Slides in the A or B direction as depicted).

Nakagawa fails to disclose a buffer pad set between the shaft seat and the shaft.

Merz et al in the same field of endeavor of protecting electronic devices against sudden shock or vibration (Col. 1 lines 5-8) discloses the use for elastomeric materials in electronic devices (Col. 17 lines 41-52) where these materials are strategically placed between "vulnerable" areas of the electronic device that are more likely to be damaged during a sudden "shock" or movement. It is well known in the art that the size, shape, and spacing along with the elastomeric material properties can be tailored to specific application requirements. (Official Notice).

The claim would have been obvious because the design incentives or market forces provided a reason to make an adaptation, and the invention resulted from application of the prior knowledge in a predictable manner.

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the scanner as disclosed by Nakagawa to incorporate the use of elastomeric material to create a padding between connecting objects, such as the shaft seat and the shaft or the upper or lower case and the shaft, which are prone to damage when apparatus is moved or

dropped as taught by Merz and well known in the art because elastomeric material can be tailored to fill gaps and provide a shock absorbing barrier to protect joined members within a device.

Regarding claim 7, Nakagawa discloses the scanner of claim 6 wherein the buffer pad is an arc-shaped elastomer set between the shaft seat and the shaft (see rejection of claim 2).

Regarding claim 8, Nakagawa discloses the scanner of claim 6 wherein the buffer pad is a ring-shaped elastomer set between the shaft seat and the shaft (see rejection of claim 3).

Regarding claim 9, Nakagawa discloses the scanner of claim 6 wherein the scanner further comprises a bolt for fixing the scanning module (see rejection of claim 1 “holding member”).

Regarding claim 10, Nakagawa disclose the scanner of claim 9 wherein the surface of the bolt is covered with an elastomer (see rejection of claim 6).

Regarding claim 11, Nakagawa discloses the scanner of claim 9 wherein a groove that contains the bolt in the scanning module is lined with an elastomer (see rejection of claim 6).

Regarding claim 12, Nakagawa discloses a scanner comprising:
a housing including an upper case and a lower case;
a shaft seat set between the upper case and the lower case;

a shaft set on the shaft seat;
a scanning module slidably set on the shaft (see rejection of claim 1); and
a buffer pad set between the shaft seat and the upper case or the lower case (see rejection of claim 6).

Regarding claim 13, Nakagawa discloses the scanner of claim 12 wherein the buffer pad is an arc-shaped elastomer set between the shaft seat and the shaft [upper case or the lower case] (see rejections of claims 2 and 6 above).

Regarding claim 14, Nakagawa discloses the scanner of claim 12 wherein the buffer pad is a ring-shaped elastomer set between the shaft seat and the shaft [upper case or the lower case] (see rejection of claims 3 and 6).

Regarding claim 15, Nakagawa discloses the scanner of claim 12 wherein the scanner further comprises a bolt for fixing the scanning module (see rejection of claim 1).

Regarding claim 16, Nakagawa discloses the scanner of claim 15 wherein the surface of the bolt is covered with an elastomer (see rejection of claim 10).

Regarding claim 17, Nakagawa discloses the scanner of claim 15 wherein a groove that contains the bolt in the scanning module is lined with an elastomer (see rejection of claim 11).

Response to Arguments

8. Applicant's arguments filed August 3, 2007 have been fully considered but they are not persuasive.

Applicant's remarks: Please note the meaning of the term "between" in the above limitation is different from that [as] depicted in the reference. According to present paragraph [0020] and Fig.3, the buffer pad 44 isolates the lock 40 from the scanning module 38. Thus the intended meaning of "between" here is physically isolating the lock 40 from the scanning module 38.

Examiner's response: Examiner understands applicant's position on this matter. According to the language used in the claimed subject matter, examiner reminds applicant that the ordinary meaning of the term "between" shall be used in which Merriam-Webster's dictionary defines as "...in the time, space, or interval that separates". According to this definition, the reference reads upon the claimed subject matter in that the pad is set "between" "the screw and the screw hole" as indicated by applicant. Examiner suggests applicant incorporates the above argument in the form of claim language to further clarify applicant's position.

Applicant's remarks: Obviously, the "frame 2" and either the guide shaft 4 or the rail 5 of Nakagawa correspond to the instant shaft seat and shaft. Fig.1 and Fig. 3 of Nakagawa shows that the "elastic member 14" is not located "between the shaft seat and the shaft" as is claimed.

Examiner's response: Placing of the "elastic member" within the structure of the scanning apparatus does not warrant patentability as it would have been obvious for a person of ordinary skill in the art to implement the invention as illustrated by the rejection of claim 6 above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

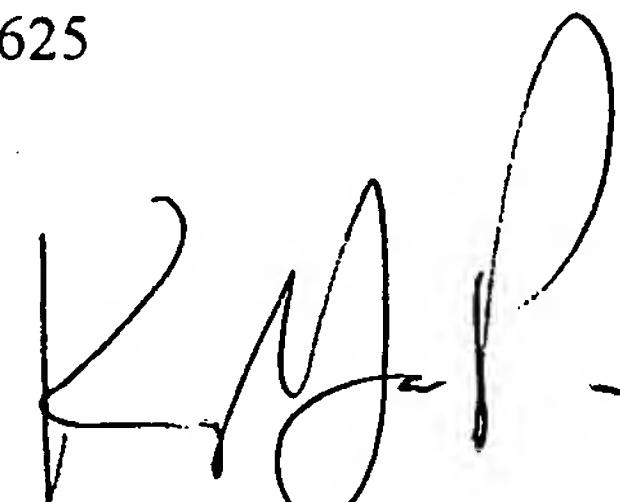
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamares Washington
Junior Examiner
Art Unit 2625

JW

October 2, 2007



KING Y. POON
SUPERVISORY PATENT EXAMINER